



DoD Global Influenza and Other Respiratory Viral Pathogens Week 16 (17 Apr – 23 Apr) Weekly Surveillance Report



NEW ISOLATES COLLECTED IN WEEK 16: 0 Influenza A, 0 Influenza B

In addition, **15** influenza A and **1** influenza B isolates were newly identified during Week 16, but were collected prior to that week. For results from individual bases, click [here](#).

SUMMARY:

Overall Results

Since **3 October 2004**, the Epidemiological Surveillance Division (AFIOH/SDE) has processed 2751 specimens as part of the influenza surveillance program. Of those specimens, 734 (27%) were positive for influenza A, and 170 (6%) were positive for influenza B. In addition, 259 specimens are still being processed. Click [here](#) for a graph of influenza positives (number and percentage) by week.

For a table of specimens submitted by individual sentinel sites, click [here](#).

Besides influenza A and B, the AFIOH lab also tests specimens for adenovirus, HSV, RSV, enterovirus, and parainfluenza pathogens. In the current week's samples, only influenza A and B were found. For viral results by week, click [here](#). Viral results are also broken down by [MAJCOM](#); counts include specimens collected prior to the current week.

Subtyping

Since **3 October 2004**, we have [subtyped](#) 623 isolates using either polymerase chain reaction (PCR) or hemagglutination-inhibition (HI): 513 are Influenza A/H3N2, 16 are Influenza B/Hong Kong, and 94 are Influenza B/Shanghai.

Age/Military Status

Overall, Influenza A seems to be dominating all [age](#) and [military status](#) categories in this flu season.

Influenza-like Illness (ILI) Rates

According to ESSENCE, [ILI rates](#) this week continue to decrease for the overall Global Military Health System.

Locations

- Click the following links for cumulative influenza results by sentinel site: [CONUS](#), [OCONUS](#)
- Results for individual bases and CDC regions can be found on the AFIOH Influenza Surveillance website: <https://gumbo.brooks.af.mil/pestilence/Influenza/>

COMMENTS ON CURRENT TRENDS: Influenza activity continues to decrease among DoD sites, and the CDC is reporting a continued decrease in activity as well. Most European countries (except for Latvia and Norway) and Japan report similar decreasing trends.

ILI rates for the whole Pacific Rim region (taken from ESSENCE) are now approaching those of other DoD sites. FYI: ILI rates for most bases have not returned to baseline; however, the baseline was skewed downward from the early peak of the 2003-04 season.

Osan AB ILI rates continued to decrease in the past week, indicating the brief rise in Week 14 was likely a statistical fluctuation. The technician who reviews ER logs at Osan did not find any rise in viral syndromes or URI during Week 14.

Camp Buehring in Kuwait reported a rise in respiratory cases during Week 16. The respiratory illness may have originated from troops recently deployed from the U.S. to Camp Buehring. Fourteen specimens arrived at AFIOH on 25 Apr for testing. Results are pending.

NATIONAL INFLUENZA ACTIVITY: CDC

<http://www.cdc.gov/ncidod/diseases/flu/weeklychoice.htm>

During week 15 (the latest report available), CDC reported continued decreasing influenza activity; the flu epidemic this year seems to have peaked in early February. Laboratory surveillance identified 50 specimens (6.1%) positive for influenza. Of these, 4 were influenza A (H3N2), 9 were influenza A viruses that were not subtyped, and 37 were influenza B. One state reported regional activity; 14 states reported local activity; and 30 states and New York City reported sporadic activity. Three states and the District of Columbia reported no activity.

INTERNATIONAL INFLUENZA ACTIVITY: WHO

<http://www.who.int/GlobalAtlas/DataQuery/home.asp>

Week in review: **Weeks 15-16**

South America: Argentina, Brazil, and Chile reported sporadic activity.

Asia: Israel and Japan reported local outbreaks. China reported sporadic activity.

Europe: Norway reported a widespread outbreak. The Russian Federation reported a regional outbreak. Latvia and Romania reported local outbreaks. France, Greece, Italy, Spain, Switzerland, and Ukraine reported sporadic activity.

North America: The United States reported sporadic activity.

Africa: Tunisia reported sporadic activity.

Note: WHO review contains information from the previous 2 weeks in order to capture delayed reports from countries.

ADDITIONAL INFORMATION:

Avian Influenza Update*:

The WHO has not posted news since 14 April 2005. For the latest report, please see:

http://www.who.int/csr/don/2005_04_14/en/

Viet Nam

The Viet Nam Ministry of Agriculture and Rural Development recently announce its plans to control avian influenza by 2006/07 and to eradicate it by 2010. Viet Nam officials said the country would make all efforts to eradicate the disease including increased culling of infected birds and breeding control measures. One action already underway is avian vaccination; trials will be complete by June of this year, and Viet Nam will start vaccinating birds in two provinces shortly. For more information see:

<http://vietnamnews.vnagency.com.vn/showarticle.php?num=01HEA190405>

http://www.vnagency.com.vn/NewsA.asp?LANGUAGE_ID=2&CATEGORY_ID=32&NEWS_ID=147855

North Korea

The Food and Agriculture Organization of the U.N. has reported that a small outbreak of avian influenza in North Korea was successfully contained. The H7 strain, which is less severe than H5N1, was detected on three farms near the capital Pyongyang; vaccination and culling of birds were used to bring the infections under control. For a full report see:

<http://www.fao.org/newsroom/en/news/2005/102016/index.html>

Cambodia

The Cambodian Ministry of Health has announced that the country's third victim of avian influenza has died. The patient was an 8-year-old girl; she died earlier this month. The MOH is currently investigating how she contracted the illness. For more information see:

<http://www.etaiwanews.com/World/2005/04/11/1113183122.htm>

*While we prefer to report events considered "official" by the WHO, we will also note wire news reports when it appears that the WHO website has not been updated.

Influenza-Associated Pediatric Deaths: During week 14, one pediatric death was reported to the CDC. During the current season, the CDC has reported 28 pediatric deaths related to influenza infection from 13 states: California, Colorado, Florida, Georgia, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New York, Ohio, Pennsylvania, and Vermont.

Please direct any questions or comments to: influenza@brooks.af.mil

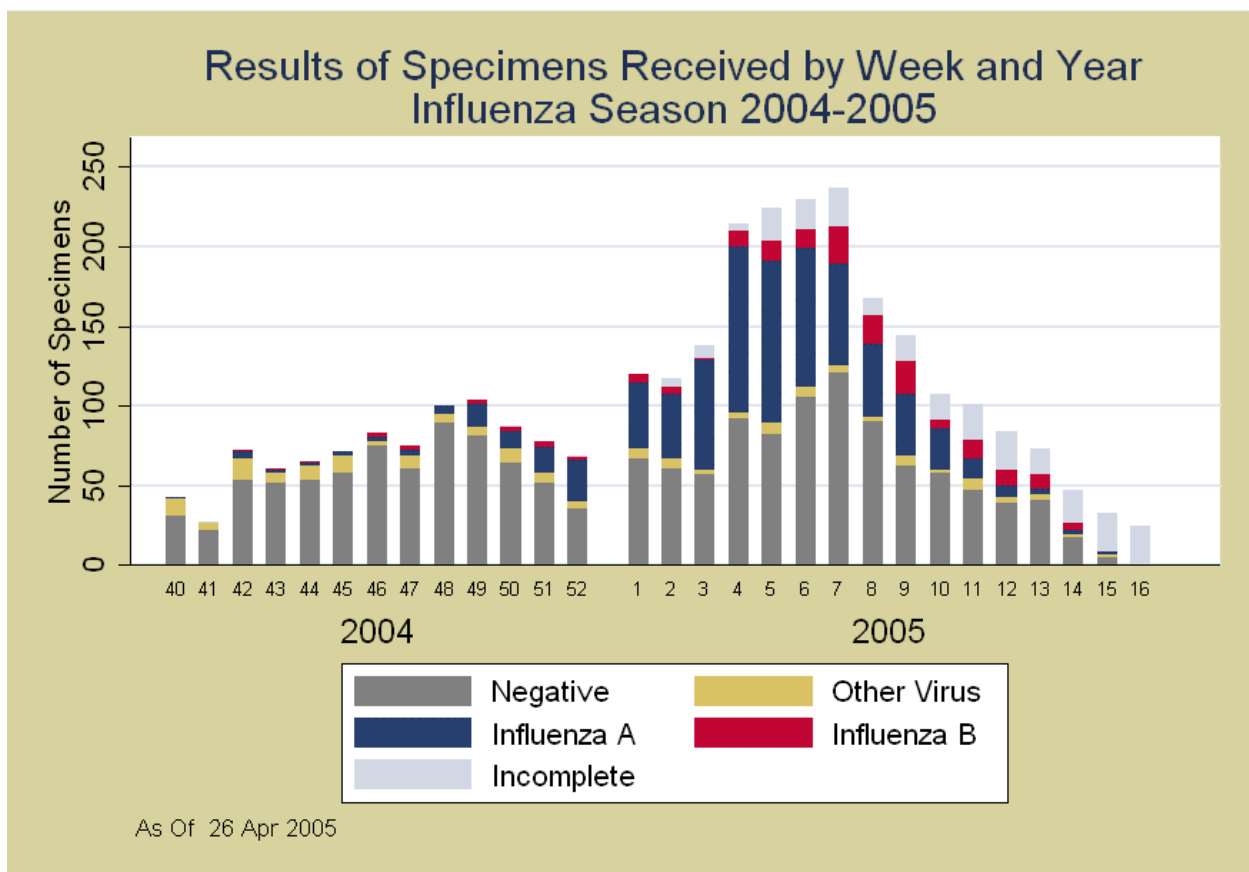
Table 1: Newly Identified Influenza Specimens this Week, by Base

Site Name	Influenza A		Influenza B	
	New*	Old**	New*	Old**
Incirlik AB, Turkey		1		
RAF Lakenheath, UK		3		
Tripler AMC, HI***		11		1

*New: newly identified and collected during current week

**Old: newly identified, but collected prior to current week

*** Specimens from Tripler were collected over a period of several weeks and sent to AFIOH together

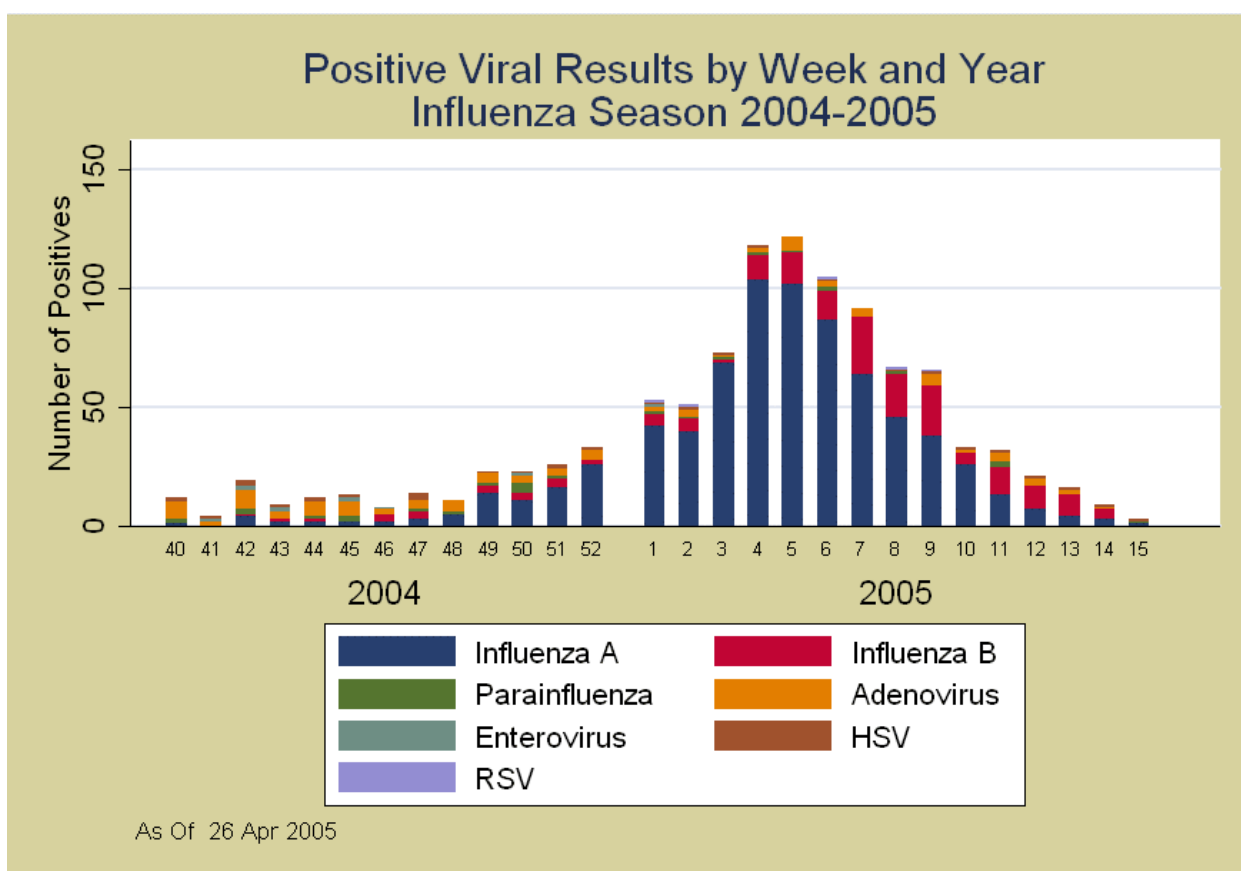


Tables 2 and 3: Respiratory Specimens Submitted by Sentinel Sites, and by Overseas Laboratories since October 3, 2004 (including Incomplete Processing)

AETC	Specimens Submitted
Maxwell AFB, AL	65
Sheppard AFB, TX	227
AMC	Specimens Submitted
Andrews AFB, MD	10
Travis AFB, CA	27
McGuire AFB, NJ	118
Scott AFB, IL	425
CENTCOM	Specimens Submitted
Ganci AB, Kyrg	0
Al Udeid AB, Qatar	12
Balad AB, Iraq	25
PACAF	Specimens Submitted
Hickam AFB/NS Pearl Harbor, HI	0
Kadena AB, Japan	1
Kunsan AB, Korea	9
Andersen AFB, Guam	14
Yokota AB, Japan	64
Misawa AB, Japan	52
Osan AB, Korea	30
Elmendorf AFB, AK	49
USAFA	Specimens Submitted
US Air Force Academy, CO	61

USAFE	Specimens Submitted
Incirlik AB, Turkey	22
Aviano AB, Italy	42
Ramstein AB, Germany	73
RAF Lakenheath, UK	276
ARMY	Specimens Submitted
Landstuhl RMC, Germany	47
Tripler AMC, HI	69
COAST GUARD	Specimens Submitted
CGS Ketchikan, AK	0
NAVY	Specimens Submitted
NMC San Diego, CA	5
NH Yokosuka, Japan	31
Bremerton NS, WA	14
NAB Little Creek, VA	78
<i>TOTAL for SENTINEL SITES</i>	<i>1846</i>

OVERSEAS LAB	Specimens Submitted
AFRIMS, Thailand	0
AFRIMS, Nepal	0
Nicaragua	0
NMRC-D, Peru	557
<i>TOTAL for OVERSEAS LABS</i>	<i>557</i>



Note: Graphs do not include data from the NHRC, which conducts Febrile Respiratory Illness (FRI) surveillance among recruit populations. NHRC compiles this data into a separate report. For more information, visit the NHRC website at <http://www.nhrc.navy.mil/geis/>

Table 4. Summary of Recently Processed Specimens from All Sites

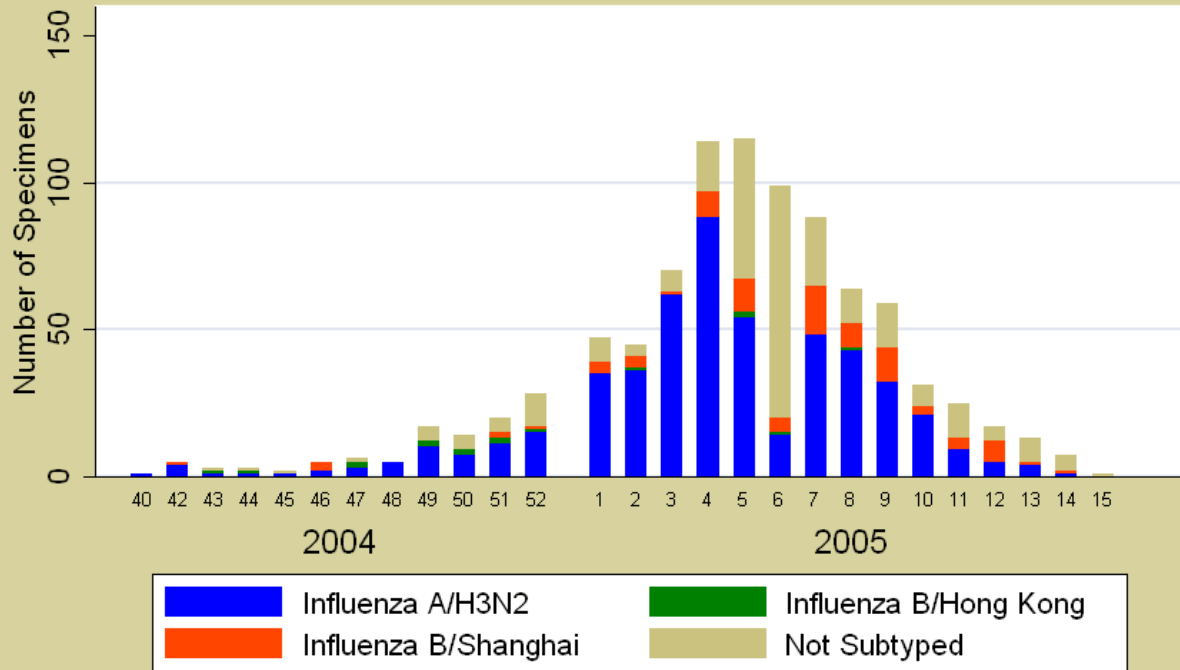
This table includes specimens collected prior to the current week, so results may not match the above graph.

Location	Results of Specimens Processed during current week*				
	Negative	Influenza A	Influenza B	Adenovirus	Other
TOTAL	33	59	14	0	3**
NORTH AMERICA	27	32	0	0	2
PACOM	3	13	14	0	1
EUCOM	1	11	0	0	0
CENTCOM	2	0	0	0	0
SOUTH AMERICA	0	3	0	0	0

Comments: * Influenza A and B totals include recent subtyping results.

**2 HSV, 1 Parainfluenza

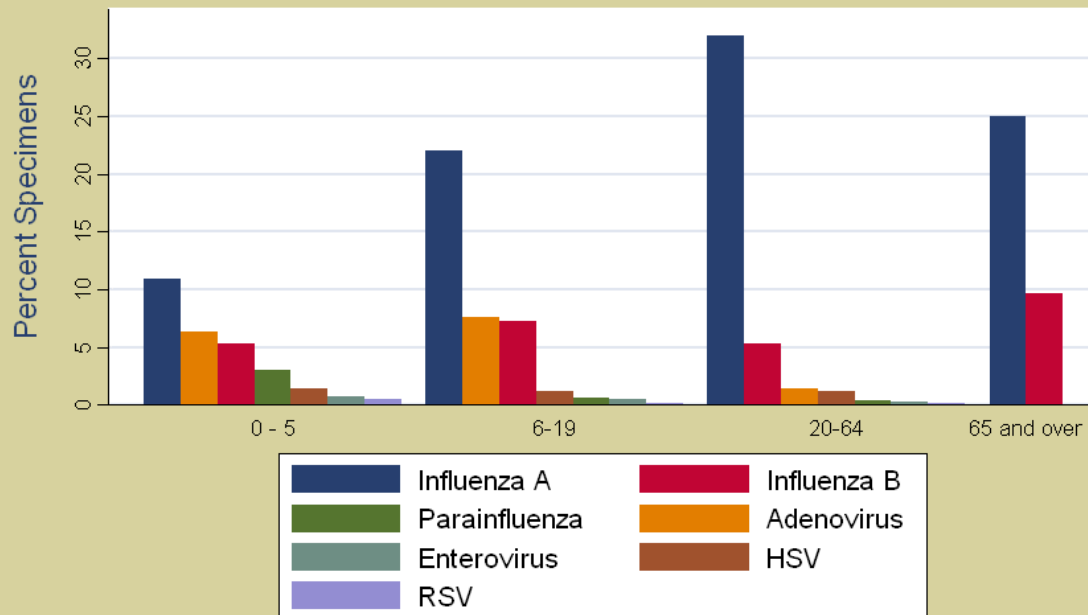
Subtyping Results by Week and Year Influenza Season 2004-2005



As Of 26 Apr 2005

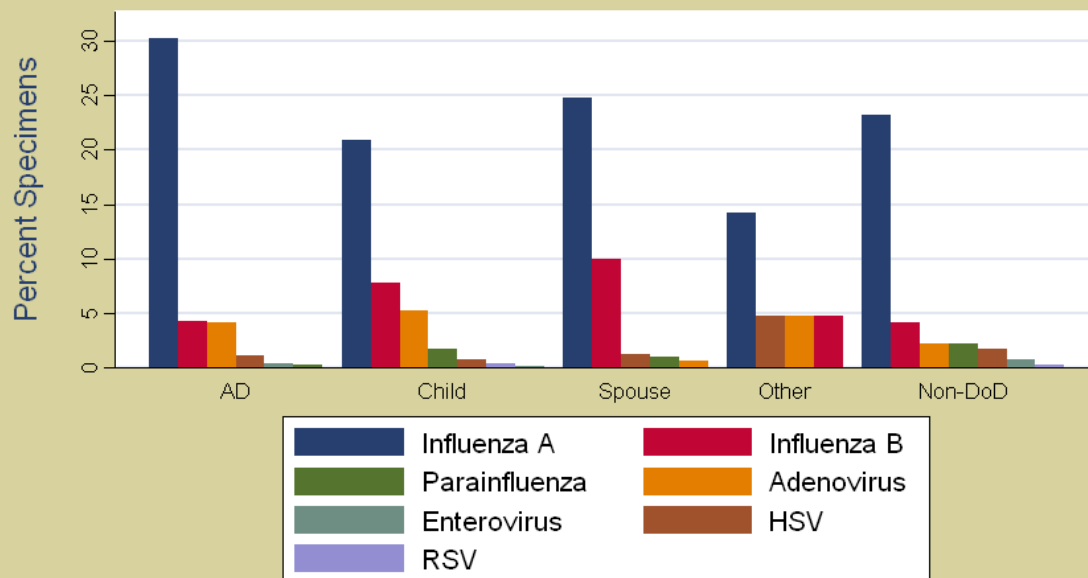
*Subtyping of samples declined in weeks 5-7 due to the heavy workload of the AFIOH laboratory during the flu season's peak. Influenza subtyping is generally performed as the schedule allows.

Percent of Respiratory Virus Submissions by Age Group Influenza Season 2004-2005



As of 26 Apr 2005

Percent of Respiratory Virus Submissions by Family Military Prefix Influenza Season 2004-2005

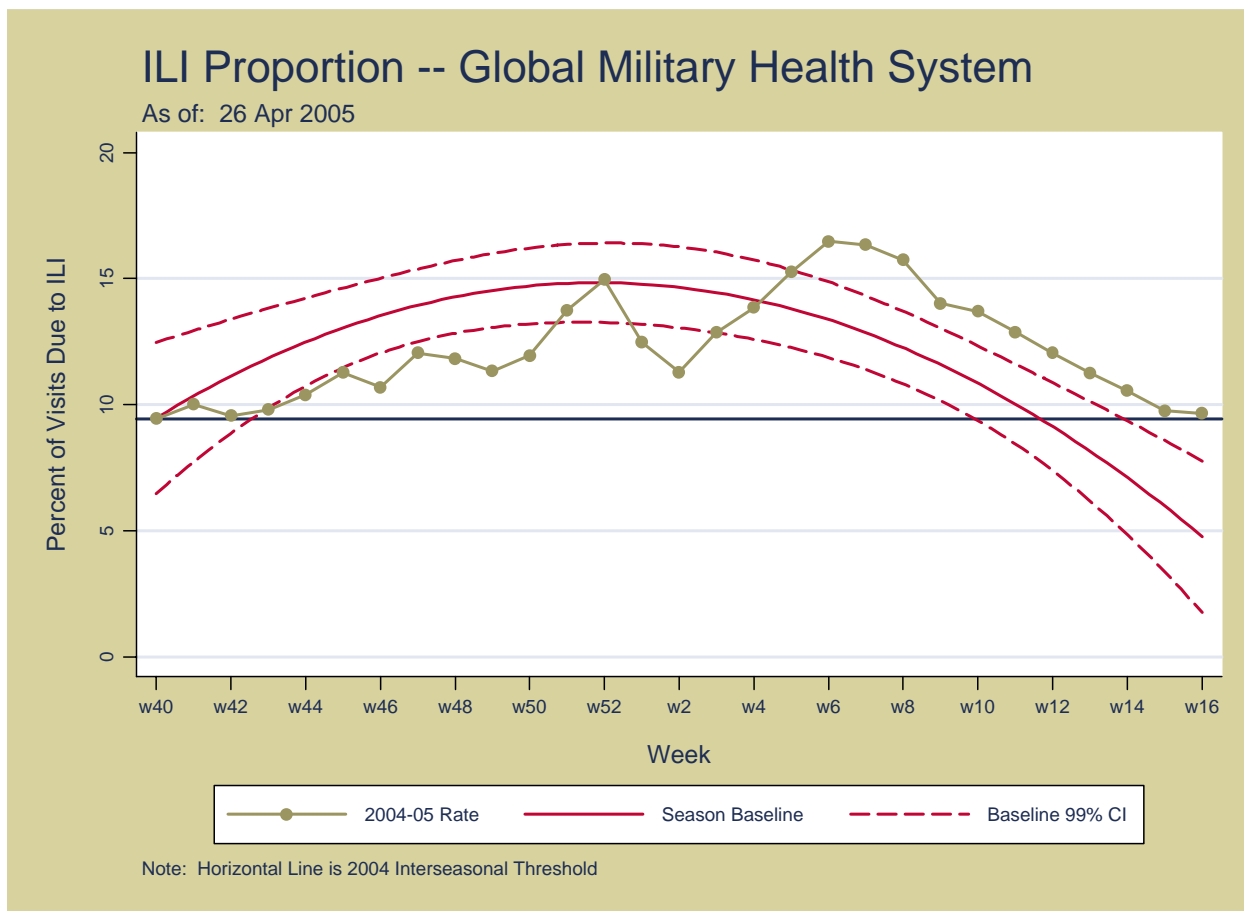


As of 26 Apr 2005

INFLUENZA-LIKE ILLNESS:

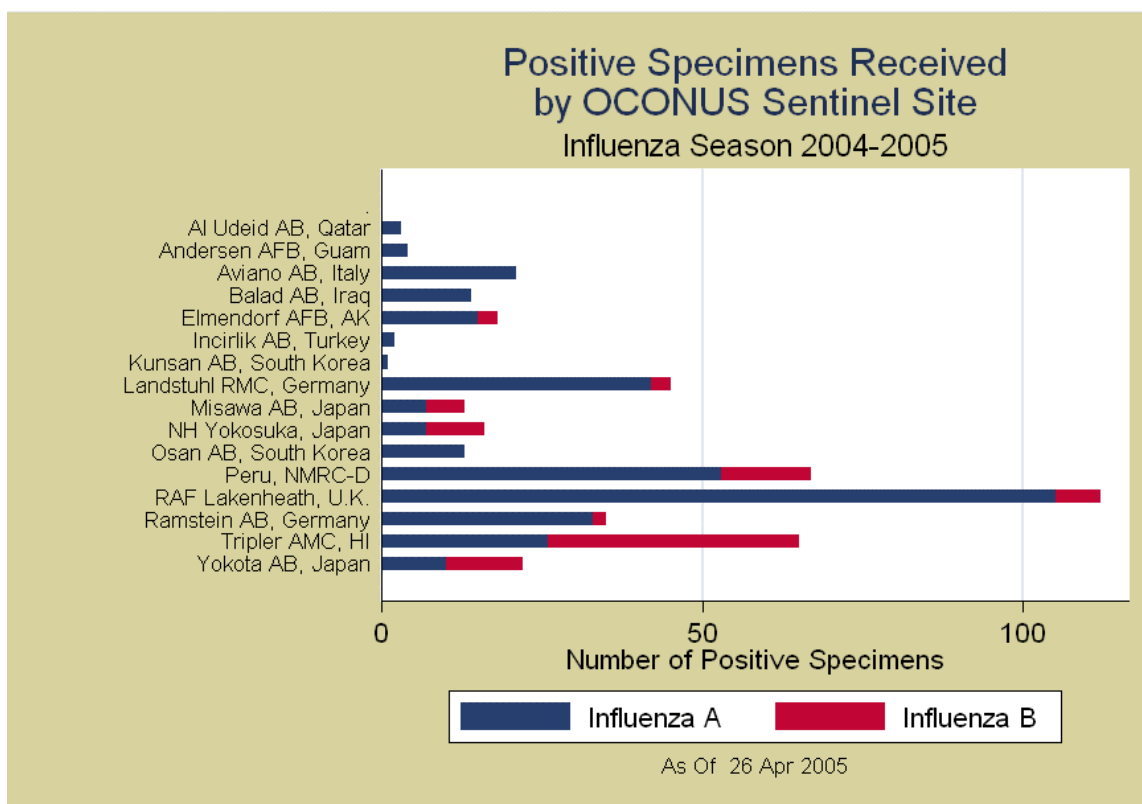
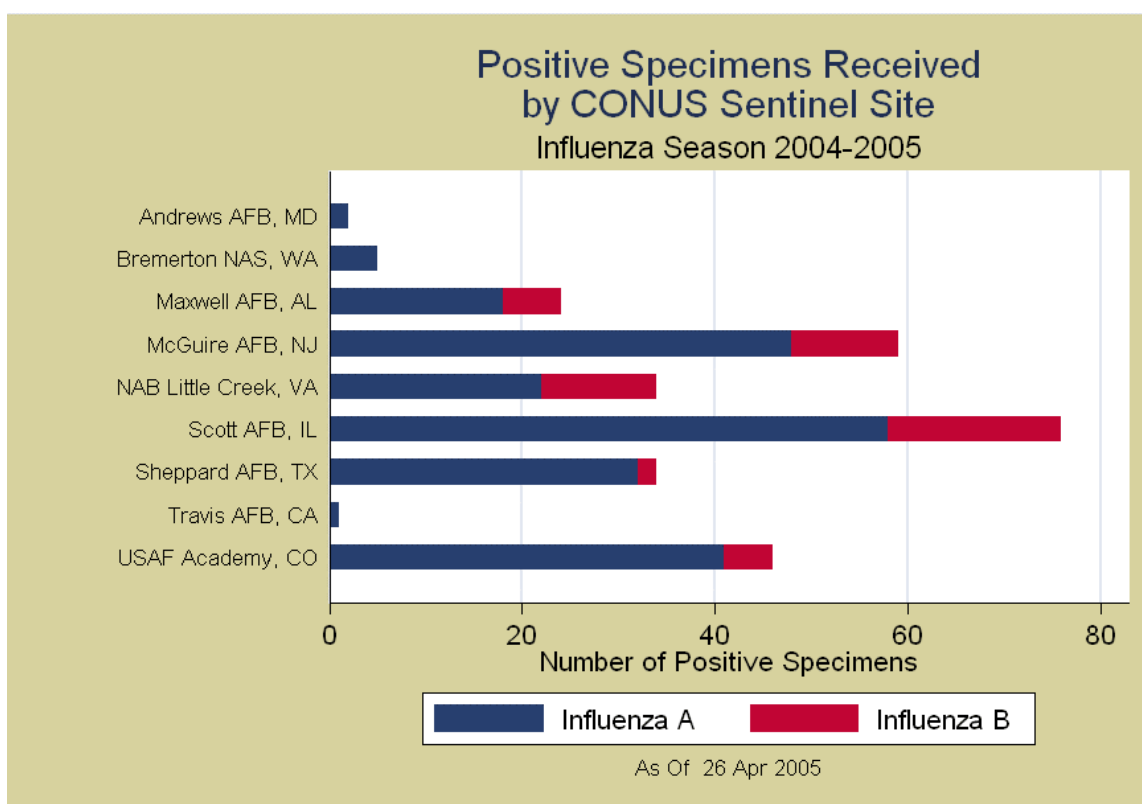
This graph plots the percentage of weekly outpatient visits at military installations that had an ICD-9 code correlating with Influenza-Like Illness as defined by ESSENCE. Visit and coding data were taken from ESSENCE. A seasonal baseline and 99% confidence intervals are included for comparison. The baseline was calculated from ESSENCE data for the previous 2 years. Because of the earlier seasonal peak in 2003-2004 (Week-52 of 2003) as compared to the later seasonal peak during the 2004-2005 season (Week-6 of 2005), the ILI-graph is offset to left by 7-weeks. After adjusting the ILI-graph (by shifting it to the right 7-weeks so that the 2003-2004 and 2004-2005 seasonal peaks coincide), the 2004-2005 ILI experience is then found to fall within or below expected levels throughout the 2004-2005 season.

Note that the ESSENCE definition for Influenza-Like Illness differs from the CDC definition. See our website for a detailed explanation.



Graphs for individual bases and regions can be found on the AFIOH Influenza Surveillance website:

<https://gumbo.brooks.af.mil/pestilence/Influenza/ILChartsform.cfm>



Numbers and graphs for individual bases can be found on the AFIOH Influenza Surveillance website:
<https://gumbo.brooks.af.mil/pestilence/Influenza/>